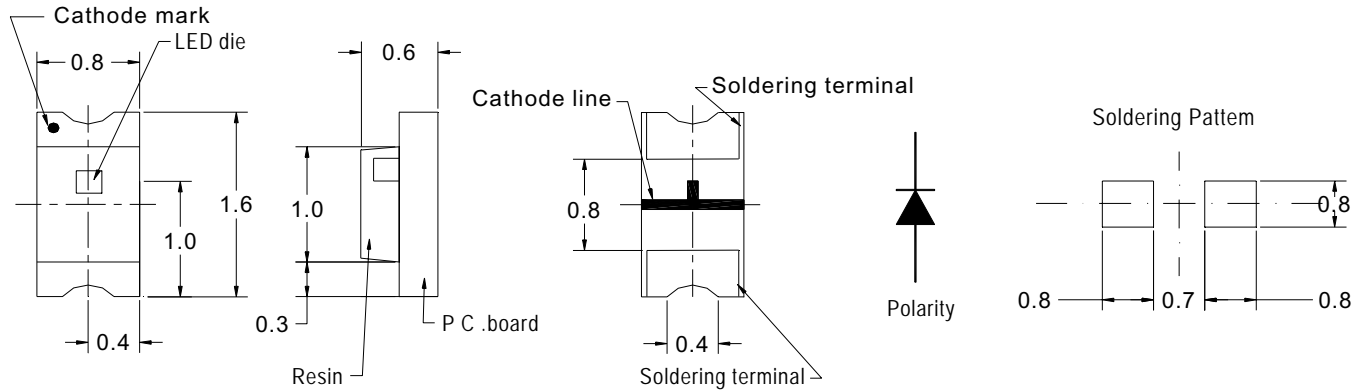




BVS-166QF2

PACKAGE CONFIGURATION



Tolerance ±0.1 mm

DESCRIPTION

Dice Material : AlGaInP/GaAs Amber
Light Color : Amber Color
Lens Color : Milky Diffused

ABSOLUTE MAXIMUM RATINGS AT Ta = 25 °C

| PARAMETER | MAX. | UNIT |
|--|------------|-------|
| Power Dissipation | 55 | mW |
| Continuous Forward Current | 20 | mA |
| Peak Forward Current (1/10 Duty Cycle , 0.1ms Pulse Width) | 100 | mA |
| Reverse Voltage | 5 | V |
| Derating Linear From 25 °C | 0.35 | mA/°C |
| Operating Temperature Range | -30 to +80 | °C |
| Storage Temperature Range | -40 to +85 | °C |
| Infrared Soldering Condition 260 °C for 5 seconds | | |
| Reflow Soldering Condition 230 °C for 10 seconds | | |

ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta = 25 °C

| SYMBOL | PARAMETER | TEST COND. | MIN. | TYP. | MAX. | UNIT |
|-------------------|--------------------------|------------------------|------|------|------|------|
| V _F | Forward Voltage | I _F = 20 mA | | 2.1 | 2.6 | V |
| I _R | Reverse Current | V _R = 5V | | | 100 | μA |
| λ _p | Peak Emission Wavelength | I _F = 20 mA | | 611 | | nm |
| λ _d | Dominant Wavelength | I _F = 20 mA | | 605 | | nm |
| 2θ _{1/2} | Viewing Angle | I _F = 20 mA | | 130 | | Deg |

BIN GRADE LIMITS (I F = 20 mA) LUMINOUS INTENSITY / mcd

| Bin | y | z | A | B | C | D |
|------|----|-----|-----|-----|-----|-----|
| Min. | 60 | 78 | 100 | 130 | 168 | 218 |
| Max. | 78 | 100 | 130 | 168 | 218 | 280 |

Tolerance ±15% mcd

*Bright View reserves the rights to alter specifications and remove availability of products at any time without notice.

*Dominant Wavelength, λ_d is according to CIE Chromaticity Diagram base on color of lamps.

*θ_{1/2} is the off-axis angle where the luminous intensity is one half the on-axis intensity.



Apply to BVS-3XX 、 1XX series.

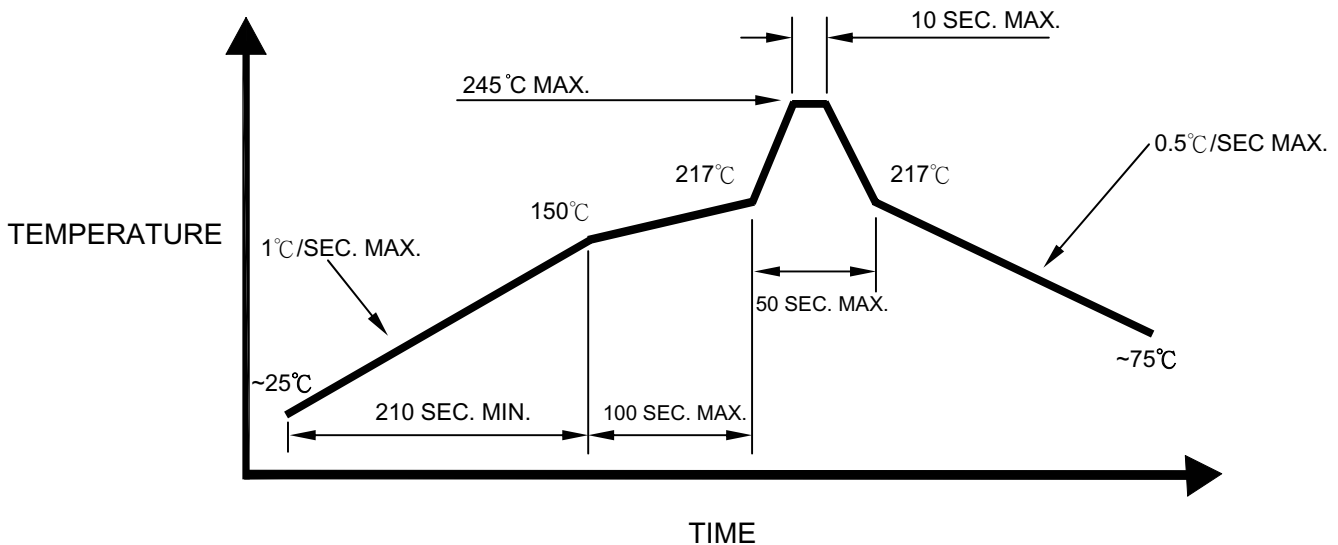
Description:

(1) Manual soldering (We do not recommend this method strongly.)

- (1.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (1.2) Temperature at tip of iron: 250°C Max. (25W)
- (1.3) It's banned to load any stress on the resin during soldering.
- (1.4) Soldering time: 3 sec. Max. (one time only)

(2) Reflow Soldering

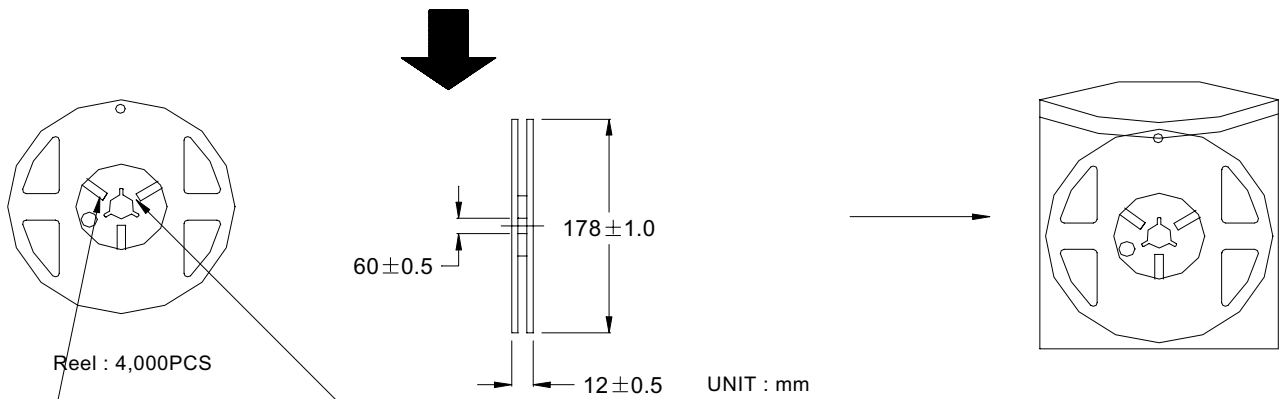
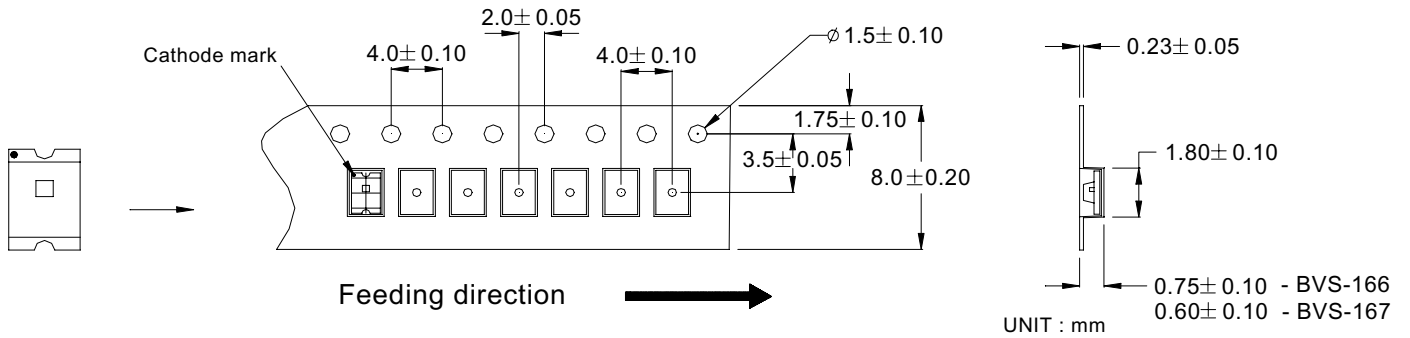
- (2.1) To prevent cracking, please bake (65°C, 24hrs) before soldering.
- (2.2) When soldering, do not put stress on the LEDs during heating.
- (2.3) Never take next process until the component is cooled down to room temperature after reflow.
- (2.4) After soldering, do not warp the circuit board.
- (2.5) The recommended reflow soldering profile (measuring on the surface of the LED resin) is following:



The reflow temperature 240°C~245°C is recommended and the soldering temperature should be not higher than 245°C (one time only)



BVS-166/167 Series



Label 1

Bright View Electronics Co.,Ltd.

PART NO.: BVS-16XXXX

LOT NO.: _____

GRADE: X - △ - ■

Q'ty _____ pcs QA

Label 2

Bright View Electronics Co.,Ltd.

PART NO.: _____

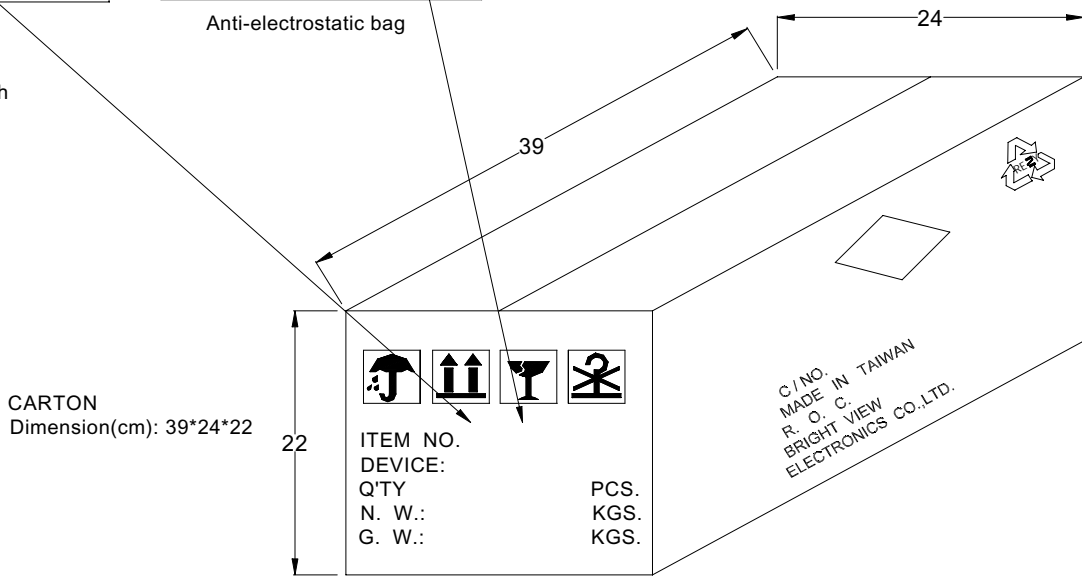
LOT NO.: _____

GRADE: _____

Q'ty _____ pcs QA

CAUTION
ELECTROSTATIC SENSITIVE DEVICES
DO NOT OPEN OR HANDLE EXCEPT
AT A STATIC-FREE WORKSTATION

Normal
X: Bin grade
△: Wavelength
■: Vf



Carton : 30 Reels
Total : 120,000PCS